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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,215	03/24/2006	Dieter Doehring	BARDP0126US	4813
23908 7590 03/17/2011 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115				
EXAMINER O HERN, BRENT T				
ART UNIT		PAPER NUMBER		
1783				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,215

Applicant(s)

DOEHRING, DIETER

Examiner

BRENT T. O'HERN

Art Unit

1783

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4, 8-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 4, 8-11 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-840)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims

1. Claims 2, 4, 8-14 and 17-20 are pending with claims 12-14 withdrawn.

WITHDRAWN REJECTIONS

2. All rejections of record in the Office actions mailed 10/26/2010 and 5/25/2010 have been withdrawn due to Applicant's amendments and arguments in the Papers filed 7/26/2010 and 2/24/2011.

Section Headings

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. Section headings including (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S) are missing.

Abstract

5. The abstract of the disclosure is objected to because it does not describe the invention. The claims are directed to a paper for a laminate panel while the Abstract is directed to coated particles. Correction is required. See MPEP § 608.01(b).

NEW REJECTIONS

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

7. Claims 2, 4, 10-11 and 17-20 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Dohring (WO 00/44984) published August 3, 2000 with Dohring (US 6,835,421) interpreted as being the English equivalent of ('984) and claims priority to ('984) in view of O'Dell et al. (US 5,545,476), Mafoti et al. (US 5,804,618) and Shirono et al. (WO 01/21529) with Shirono et al. (US 6,994,834) interpreted as being the English equivalent of ('529).

Independent claim 19 is broad.

Regarding claims 2, 4, 11 and 17-20, Dohring ('984) teaches paper for a laminate panel with a decorative paper provided with a décor and is impregnated with an amino

resin for forming a resin matrix and comprises abrasion-resistant particles having a diameter of 50 to 200 μm /(90 to 130 μm) made of silicon carbide or aluminum oxide and containing corundum that are coated with a silane adhesion promoter and are integrated into the resin matrix (*See col. 1, l. 47 to col. 2, l. 11 and Abstract.*), however, fails to expressly disclose the outer coating consisting of an amino-silane adhesion promoter.

O'Dell ('476) teaches a paper for a laminate with abrasion resistant particles coated with a silane adhesion promoter (*See col. 6, ll. 42-48.*) for a structure having three or more layers (*See col. 4, ll. 4-26 and 42-58 and Abstract.*) for the purpose of providing an aesthetic laminate with better initial better wear resistance (*See col. 6, ll. 42-48 and Abstract.*).

Mafoti ('618) teaches a decorative paper for a laminate panel containing particles including an amino-silane adhesion promoter (*See Abstract, col. 1, ll. 11-27, col. 2, l. 66 to col. 3, l. 6, col. 4, ll. 4-31, col. 11, ll. 5-11, claims 1, 6, 18 and 25.*) for the purpose of increasing the bonding strength between the members (*See col. 11, ll. 5-11.*). Amino-silane adhesion promoters are common in the decorative paper art.

Shirono ('529) teaches using an amino silane adhesion promoter for modifying silica powder (*See Abstract and col. 2, ll. 29-67.*) for the purpose of significantly increasing the adsorption amount of the anion source (*See col. 2, ll. 63-67.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use an amino silane adhesion promoter as taught by Mafoti ('618), Shirono ('529) and O'Dell ('476) in Dohring ('984) in order to

provide a paper having particles with increased adsorption capacity and stronger bonds for an aesthetic laminate having better initial wear resistance

Regarding claim 10, Dohring ('984) obviously teaches the abrasion resistant particles being in a plane (*See col. 1, l. 47 to col. 2, l. 11 and Abstract where the paper is planar, thus, providing for the particles being embedded within the paper to also be in a planar orientation.*).

8. Claims 2, 4, 8-11 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohring et al. (US 2003/0138600) in view of O'Dell et al. (US 5,545,476), Mafoti et al. (US 5,804,618) and Shirono et al. (WO 01/21529) with Shirono et al. (US 6,994,834) interpreted as being the English equivalent of ('529).

Independent claim 19 is broad.

Regarding claims 2, 4, 8-9, 11 and 17-20, Dohring ('600) teaches paper for a laminate panel with a decorative paper filled with an acrylate provided with a décor having a weight of 20 to 60 g/m² and is impregnated with an amino resin for forming a resin matrix and comprises abrasion-resistant particles having a diameter of 50 to 200 μm (90 to 130 μm) made of silicon carbide or aluminum oxide and containing corundum that are coated with a silane adhesion promoter and are integrated into the resin matrix (*See paras. 20-31.*), however, fails to expressly disclose the outer coating consisting of an amino-silane adhesion promoter.

O'Dell ('476) teaches a paper for a laminate with abrasion resistant particles coated with a silane adhesion promoter (*See col. 6, ll. 42-48.*) for a structure having three or more layers (*See col. 4, ll. 4-26 and 42-58 and Abstract.*) for the purpose of

providing an aesthetic laminate with better initial better wear resistance (*See col. 6, ll. 42-48 and Abstract.*).

Mafoti ('618) teaches a decorative paper for a laminate panel containing particles including an amino-silane adhesion promoter (*See Abstract, col. 1, ll. 11-27, col. 2, l. 66 to col. 3, l. 6, col. 4, ll. 4-31, col. 11, ll. 5-11, claims 1, 6, 18 and 25.*) for the purpose of increasing the bonding strength between the members (*See col. 11, ll. 5-11.*). Amino-silane adhesion promoters are common in the decorative paper art.

Shirono ('529) teaches using an amino silane adhesion promoter for modifying silica powder (*See Abstract and col. 2, ll. 29-67.*) for the purpose of significantly increasing the adsorption amount of the anion source (*See col. 2, ll. 63-67.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use an amino silane adhesion promoter as taught by Shirono ('529) and O'Dell ('476) in Dohring ('600) in order to provide a paper having particles with increased adsorption capacity for an aesthetic laminate having better initial wear resistance

Regarding claim 10, Dohring ('600) obviously teaches the abrasion resistant particles being in a plane (*See paras. 20-31 where the paper is planar, thus, providing for the particles being embedded within the paper to also be in a planar orientation.*).

9. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohring (WO 00/44984) published August 3, 2000 with Dohring (US 6,835,421) interpreted as being the English equivalent of ('984) and claims priority to ('984) in view of O'Dell et al. (US 5,545,476), Mafoti et al. (US 5,804,618), Shirono et al. (WO

01/21529) with Shirono et al. (US 6,994,834) interpreted as being the English equivalent of ('529) and Jaisle et al. (US 4,473,613).

Dohring ('984), O'Dell ('476), Mafoti ('618) and Shirono ('529) teach the paper discussed above, however, fail to expressly disclose the paper having a weight of 20 to 60 g/m² and being filled with an acrylate.

However, Jaisle ('613) teaches providing an acrylate filled paper having a décor having a weight of 20 to 60 g/m² (*See Abstract, col. 2, ll. 52-68. col. 3, ll. 31-37 and col. 4, ll. 35-40.*) for the purpose of providing a material that easy to form, resistant to discoloration, can be printed and is useful in high or low pressure laminates (*See col. 4, ll. 35-40.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use an acrylate filled paper having the above weight as taught by Jaisle ('613) in Dohring ('984) in order to provide a product that is easy to form, resistant to discoloration, can be printed and is useful in various types of laminates.

ANSWERS TO APPLICANT'S ARGUMENTS

10. In response to Applicant's arguments (*See p. 5, para. 1 of Applicant's paper filed 7/26/2010.*) that a person would not refer to Shirano because Shirano is directed to an ink acceptor layer while Dohring ('984) and O'Dell are directed to laminate panels, it is noted that said arguments are not persuasive. Dohring ('984) is directed to decorative papers that are impregnated with an amino resin and particles that are usable in laminates (*See Abstract and col. 1, l. 47 to col. 2, l. 11.*). Shirano is directed to

decorative papers that are impregnated with an amino resin and particles (*See Abstract, col. 2, ll. 29-67 and col. 4, ll. 6-21.*). Thus, since both Dohring ('984) and Shirano are directed toward decorative papers impregnated with amino resin and particles it would have been obvious to look to Shirano. Applicant has not addressed the teachings of Mafoti. Mafoti also teaches a decorative paper for a laminate panel containing particles including an amino-silane adhesion promoter (*See Abstract, col. 1, ll. 11-27, col. 2, l. 66 to col. 3, l. 6, col. 4, ll. 4-31, col. 11, ll. 5-11, claims 1, 6, 18 and 25.*) for the purpose of increasing the bonding strength between the members (*See col. 11, ll. 5-11.*). Thus, even if one does not look to Shirano one can look to Mafoti which teaches the same type of amino-silane adhesion promoter as claimed and taught by Shirano. Amino-silane adhesion promoters are common in the decorative paper art/laminate arts.

11. In response to Applicant's arguments (*See p. 5, para. 2 of Applicant's paper filed 7/26/2010.*) that Dohring ('984) and O'Dell do not mention the dies of treating particles with a resin to lead to optically and mechanically improved surfaces and a person would not refer to Shirano because Shirano is directed to an ink acceptor layer while Dohring ('984) and O'Dell are directed to laminate panels and Dohring ('984) does not teach coating particle prior to adding to a dispersion but rather teaches using a dispersion of an amino resin, it is noted that said arguments are not persuasive. Applicant's arguments are not commensurate in scope with the claims. The claims do not claim any dies or any specific optical or mechanical properties. Dohring ('984) specifically states the papers are "decorative" and "patterned" and "highly wear resistant" (*See col. 1, ll. 7-11.*), thus, these materials are optically attractive and mechanically improved.

12. In response to Applicant's arguments (*See p. 6, para. 1 of Applicant's paper filed 7/26/2010.*) that Shirano does not provide any hint or information for the skilled person to do so and only teaches modifying a silica powder to increase adsorption to provide an improved printing material, it is noted that said arguments are not persuasive. The first part of Applicant's arguments are not clear as a reference statement appears to be missing from the conclusion. Perhaps Applicant means to refer back to the arguments regarding the other references. Independent claim 19 is directed to a paper that can be used for a panel and not a panel. Shirano is not cited for teaching the entire claim but rather for using a silane adhesion for modifying silica powder (*See Abstract and col. 2, ll. 29-67.*).

13. In response to Applicant's arguments (*See p. 6, para. 2 of Applicant's paper filed 7/26/2010.*) that O'Dell teaches preparing a dispersion containing water, binder material and abrasion-resistant particles and not the same abrasion resistant particles as claimed, it is noted that said arguments are not persuasive. Independent claim is broad with the particles only being described as "abrasion resistant particles". O'Dell specifically states its particles have "better initial wear resistance" (*See col. 6, ll. 42-48.*), thus this type of particle satisfy Applicant's broad particles per independent claim 19. Furthermore, the primary reference Dohring ('984) teaches the specific particles (*See col. 1, l. 47 to col. 2, l. 11 and Abstract.*) as claimed in the dependent claims.

14. In response to Applicant's arguments (*See p. 7, para. 1 of Applicant's paper filed 7/26/2010.*) that Dohring ('600) does not teach coating abrasion particles but rather using a dispersion of a melamine resin and one would not have predicted that the

coating would provide superior optical and mechanical properties, it is noted that said arguments are not persuasive. Dohring ('600) teaches paper for a laminate panel where the particles together with amino resin are sprayed onto the paper (*See para. 29.*). Thus, since the resin and the particles are in a same mixture the particles are clearly coated. Dohring's ('600) product is patterned, decorative and wear resistant (*See paras. 5, 7, 9 and 26.*).

15. In response to Applicant's arguments (*See p. 7, paras. 2-3 of Applicant's paper filed 7/26/2010.*) that Jaisle does not cure the deficiencies of the other references for claims 8-9, it is noted that no precise arguments are set forth.

16. In response to Applicant's arguments (*See pp. 2-3 of Applicant's paper filed 2/24/2011.*) that Shirano should not be used as a reference because it is not directed to a laminate, it is noted that said arguments are not persuasive. The newly cited Mafoti reference teaches the same type of amino-silane adhesion promoter as claimed and taught by Shoirano and is directed to a laminate with a decorative paper (*See Abstract, col. 1, ll. 11-27, col. 2, l. 66 to col. 3, l. 6, col. 4, ll. 4-31, col. 11, ll. 5-11, claims 1, 6, 18 and 25.*). Amino-silane adhesion promoters are common in the decorative paper art/laminate arts.

17. In response to Applicant's arguments (*See p. 2-3 of Applicant's paper filed 2/24/2011.*) that a person would not refer to Shirano because Shirano is directed to an ink acceptor layer while Dohring ('984) and O'Dell are directed to laminate panels, it is noted that said arguments are not persuasive. Dohring ('984) is directed to decorative papers that are impregnated with an amino resin and particles that are usable in

laminates (*See Abstract and col. 1, l. 47 to col. 2, l. 11.*). Shirano is directed to decorative papers that are impregnated with an amino resin and particles (*See Abstract, col. 2, ll. 29-67 and col. 4, ll. 6-21.*). Thus, since both Dohring ('984) and Shirano are directed toward decorative papers impregnated with amino resin and particles it would have been obvious to look to Shirano. The newly cited Mafoti reference is directed to the same arts as Dohring ('984) and Shirano.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT T. O'HERN whose telephone number is (571)272-6385. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T O'Hern/
Examiner, Art Unit 1783
March 11, 2011